



ADVANCED STRUCTURAL MATERIALS

EDITED BY

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TRANS TECH PUBLICATIONS

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Advanced Structural Materials

Special topic volume with invited peer-reviewed papers only

Edited by

**Dr. Thangaprakash Sengodan, Dr. Peter Horňak,
Dr. Miloš Matvija, Dr. Denis B. Solovev
and Prof. Dr. Ramadhansyah Putra Jaya**

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Trans Tech Publications Ltd
Seestrasse 24c
CH-8806 Baech
Switzerland
<https://www.scientific.net>

Volume 1081 of
Materials Science Forum
ISSN print 0255-5476
ISSN web 1662-9752

Full text available online at <https://www.scientific.net>

Distributed worldwide by

Trans Tech Publications Ltd
Seestrasse 24c
CH-8806 Baech
Switzerland

Phone: +41 (44) 922 10 22
e-mail: sales@scientific.net

Preface

This special topic edition is devoted to current issues in materials science and materials synthesis and processing technologies.

The publication's first part includes research results on the properties, structure, synthesis and processing technologies of polymer materials, composites, metal matrix composites, and some types of ceramics. The analysis of the application of various techniques and materials for reinforcement, assessment of hardness, wear behaviour and machinability of polymeric and composite materials are also research subjects in this chapter.

The second chapter is devoted to evaluating the properties and analysing some processing technologies of structural metals. Mechanical properties, microstructure and practice optimising technological parameters are also investigated here.

Concrete and cement properties and consistency, structural properties of modern wooden materials, and thermal insulation materials are the main topics of the last chapter.

The edition will be useful to specialists in materials science, machinery and construction.

Table of Contents

Preface

Chapter 1: Composites, Polymers, Ceramics

Effect of Temperature on Dynamic Characteristics of Carbon - Kevlar Fiber Reinforced Composites D. Raviteja, V.V. Kamesh and S. Kunar	3
Fabrication of Aluminium Hybrid Metal Matrix Composite Reinforced with Silicon Carbide and Graphite by Stir Casting Method K. Sekar and P. Vasanthakumar	11
Optimization of Mechanical Performance for 3D Printed Kevlar and Carbon Fiber Composites A. Tallam, S. Bollu, Y.S. Narayan and J.P. Kode	23
Implementing Combinative Distance Base Assessment (CODAS) for Selection of Natural Fibre for Long Lasting Composites S. Wankhede, P. Pesode, S. Gaikwad, S. Pawar and A. Chipade	41
Process Parameter Optimization of FDM 3D Printer Using PETG and Carbon Fiber PETG S.S. Sunder and V.V.D. Sahithi	49
Hardness and Wear Behavior of Heat Treated Aluminium Silicon Alloy SiC Particle Reinforced Composite K. Sunitha, K. Gurusami, N. Rajeswari, S.K. Abhishek, P. Naik and T. Natso	59
Failure Analysis in a Multilayerd Glass Fiber Reinforced Polyester Composite Plates under Flexural Loading B. Veerappan, K.L. Gokulraju, S. Sreenivas and K.J. Nagarajan	67
Analysis and Optimization of Machinability of Al₂O₃ and Fly Ash Reinforced Aluminum Hybrid Composites Using Carbide Inserts V. Veeranaath, M. Faiyaz and R. Shankar	83
Feasibility Study of Microwave Welding of Polypropylene Using Silicon Carbide Nanowhiskers as Microwave Susceptor P.Y. Foong, C.H. Voon, B.Y. Lim, P.L. Teh and M.A. Rojan	93
Study Thermal Resistance of γ-Al₂O₃ at Various Reaction Temperatures via TGA Analysis A.A. Bin Mokaizh, A. Hamid Nour, O.R. Alara and M. Abdulqawi	101
Application of Composite Filament with the Addition of Metallic Powders in 3D Printing A. Dzindziora, M. Sulowski and D. Dzienniak	109

Chapter 2: Metallurgical Processes, Properties and Processing of Structural Metals

Oxide Film Formation on Stainless Steel 304L by Anodizing Method with Different Power Sources N.S. Azmi, M.N.B. Derman and Z. Che Daud	117
Highly Accurate Structural Analysis of Austempered Ductile Iron Using EBSD Technique P. Kejzlar, Z. Andrsava, M. Petrzkova, B. Skrbek, A. Duchac and D. Myszka	125
Optimization of the Manufacturing Process of Sintered Fe-Mn-Cr-Mo-C Steels Using ANOVA M. Sulowski, P. Matusiewicz and P. Kij	131
Direct Production of Tin Bronzes from Copper and Cassiterite R. Haubner and S. Strobl	137
Microstructure-Properties Characterization of Selective Laser Melted Biomedical Co-28Cr-6Mo Alloy B. Efremenko, V. Zurnadzhy, Y. Chabak, A. Lekatou, P. Horňak, M. Vojtko and V. Efremenko	143
Effect of Rare-Earth Doping on Dynamic Magnetic Properties of FeGa Alloy V. Milyutin, Z. Birčáková, M. Fáberová, R. Bureš, P. Kollár and J. Füzér	149

Optimization of Raster Point Deposition Methodology for Deformation Analyses A. Duchac and P. Kejzlar	155
Formation of Alpha-Case Layer during Oxidation of Ti6Al4V Surface by Annealing at 1050 °C and Change of Microstructure after Different Cooling Rates J. Belan, M. Uhrčík, L. Kuchariková, E. Tillová and L. Pastierovičová	161
Study of the Properties of Dust from the Production of Prebaked Anodes for its Use as a Reducing Agent in Silicon Smelting N.V. Nemchinova, A.A. Tyutrin and M.N. Dolgikh	167

Chapter 3: Building Materials

Safety and Reliability of Concrete Components in Water Supply and Disposal Y.V. Vasilieva and V.M. Fedorov	175
Investigation of the Use of Micronized Dunite Additive for Fine-Grained Concrete S.G. Moskvitin, L.V. Moskvitina, A.A. Vasilyeva and G.D. Fedorova	183
Preparation of Wood Filler for Arbolite N.P. Lukutsova, A.A. Pykin, E.G. Artamonova and O.N. Chernyshev	191
New Thermal Insulation Materials from Waste of Mechanical Processing of Wood A.A. Lukash, N.P. Lukutsova, O.N. Chernyshev and E.Y. Gornostaeva	197
Plywood for Construction Purposes on a Phenol-Formaldehyde Binder Modified with Hydrogen Peroxide T.N. Vachnina, A.A. Fedotov, I.V. Susoeva and V.I. Deryugin	203
Effect of Non-Functional Polyorganosiloxane Additives on the Hydrophysical Properties of Cement Systems S.V. Vavrenyuk, V.G. Vavrenyuk and N.V. Kuznetsov	209
Molecular Dynamics Simulation of Structural Properties of Hydrated Tobermorite Y.A. Abzaev, S.V. Korobkov and A.I. Gnyrya	215

References

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Keyword Index

3D Printing	23, 109		
3D Printing FDM	49		
A			
A356 Alloy	59		
AA2014-SiC-Graphite	11		
Additive	191		
Alpha-Case Layer	161		
Aluminum Hybrid Composites	83		
Aluminum Waste Cans	101		
Analysis of Variance (ANOVA)	131		
Annealing	161		
Anodizing	117		
Arbolite	191		
Archaeometallurgy	137		
ASTM Standards	23		
Ausferrite	125		
Autoclaving	183		
B			
Bronze	137		
C			
Carbon-Containing Technogenic Raw Materials	167		
Carbon Fiber PETG	49		
Carbon Fiber Reinforced Composite	3		
Cassiterite	137		
Cement	183		
Cement Stone	209		
Chipping	203		
Co-28Cr-6Mo Alloy	143		
CODAS	41		
Coefficient of Thermal Expansion	3		
Composites	41		
Copper Filament	109		
Corrosion	11		
D			
Deformation Analyses	155		
Dunite	183		
Dynamic Mechanical Analysis	3		
E			
EBSD		125	
Efflorescence		209	
Elastic Moduli		215	
Electron Microscopy		197	
F			
Failure Index		67	
Failure Theories		67	
FeGa		149	
FeGaRE		149	
Fiber Reinforced Composites		3	
Fine-Grained Concrete		183	
Flexural Strength		23	
FSF Plywood		203	
G			
γ -Al ₂ O ₃		101	
Glass Fiber		67	
Glass Transition		3	
Gypsum-Wood Composite		197	
H			
Hardness		11, 59	
Heat Treatment		125	
High Frequency		149	
Hot-Dip Galvanized Metal Sheets		155	
Hydrated Tobermorite		215	
Hydrogen Peroxide		203	
Hydrophobization		209	
I			
Impact Strength		23	
Impact Test		11	
IR Spectra		203	
J			
Joining		93	
L			
Laminated Composites		67	
Longevity		175	

		Selective Laser Melting	143
		SEM	11
		SiC	59
		Silica-Containing Raw Materials	167
		Silica Sol	191
		Silicon Carbide	93
		Silicon Smelting	167
		Sliding Wear	143
		Smelting Metallurgical Silicon	167
		Stainless Steel 304L	117
		Static Bending	203
		Stir Casting	11, 83
		Strength	175, 183, 191
		Structural PM Steels	131
		Structure	125
		Supercells	215
		Superplasticizer	183
		Susceptor	93
		T	
		T6 Heat Treatment	59
		Taguchi Analysis	83
		Tensile Strength	23, 203
		TGA	101
		Thermal Insulation Materials	197
		Thermomechanical Analysis	3
		Ti6Al4V Alloy	161
		W	
		Water Absorption	209
		Water Supply System	175
		Wear	11, 59
		Wood Filler	191
		Wood Filler Treatment	191
M			
Machinability	83		
Magnetic Properties	149		
MCDM	41		
Mechanical Testing	49		
Metallography	125		
Microstructure	143		
Microstructure Analysis	155		
Microstructure Changes	161		
Microwave Welding	93		
Mineral Additive	183		
Modifiers	209		
MOORA	41		
N			
Nanoindentation	143		
Nanowhiskers	93		
Natural Fibre	41		
O			
Organosilicon Compounds	209		
Oxidation	161		
Oxide Film	117		
P			
PETG	49		
Phenol-Formaldehyde Binder	203		
PLA	109		
Point Pattern Deposition	155		
Polydiorganylsiloxanes	209		
Polymer Structure	209		
Polyorganylsilsesquioxanes	209		
Powder Metallurgy	131		
Printed Composite	109		
Process Parameter Optimization	49		
Progressive Failure Analysis	67		
R			
Reaction Temperature	101		
Reactivity	183		
Reinforced Concrete Components	175		
Reliability	175		
Rietveld Refinement	215		
S			
Safety	175		

Author Index

A

Abdulqawi, M.	101
Abhishek, S.K.	59
Abzaev, Y.A.	215
Alara, O.R.	101
Andrsova, Z.	125
Artamonova, E.G.	191
Azmi, N.S.	117

B

Belan, J.	161
Bin Mokaizh, A.A.	101
Birčáková, Z.	149
Bollu, S.	23
Bureš, R.	149

C

Chabak, Y.	143
Che Daud, Z.	117
Chernyshev, O.N.	191, 197
Chipade, A.	41

D

Derman, M.N.B.	117
Deryugin, V.I.	203
Dolgikh, M.N.	167
Duchac, A.	125, 155
Dzienniak, D.	109
Dzindziora, A.	109

E

Efremenko, B.	143
Efremenko, V.	143

F

Fáberová, M.	149
Faiyaz, M.	83
Fedorov, V.M.	175
Fedorova, G.D.	183
Fedotov, A.A.	203
Foong, P.Y.	93
Füzer, J.	149

G

Gaikwad, S.	41
Gnyrya, A.I.	215
Gokulraju, K.L.	67
Gornostaeva, E.Y.	197
Gurusami, K.	59

H

Hamid Nour, A.	101
Haubner, R.	137
Hornák, P.	143

K

Kamesh, V.V.	3
Kejzlar, P.	125, 155
Kij, P.	131
Kode, J.P.	23
Kollár, P.	149
Korobkov, S.V.	215
Kuchariková, L.	161
Kunar, S.	3
Kuznetsov, N.V.	209

L

Lekatou, A.	143
Lim, B.Y.	93
Lukash, A.A.	197
Lukutsova, N.P.	191, 197

M

Matusiewicz, P.	131
Milyutin, V.	149
Moskvitin, S.G.	183
Moskvitina, L.V.	183
Myszka, D.	125

N

Nagarajan, K.J.	67
Naik, P.	59
Narayan, Y.S.	23
Natso, T.	59
Nemchinova, N.V.	167

P

Pastierovičová, L.	161
Pawar, S.	41
Pesode, P.	41
Petrzilkova, M.	125
Pykin, A.A.	191

R

Rajeswari, N.	59
Raviteja, D.	3
Rojan, M.A.	93

S

Sahithi, V.V.D.	49
Sekar, K.	11
Shankar, R.	83
Skrbek, B.	125
Sreenivas, S.	67
Strobl, S.	137
Sulowski, M.	109, 131
Sunder, S.S.	49
Sunitha, K.	59
Susoeva, I.V.	203

T

Tallam, A.	23
Teh, P.L.	93
Tillová, E.	161
Tyutrin, A.A.	167

U

Uhrčík, M.	161
------------	-----

V

Vachnina, T.N.	203
Vasanthakumar, P.	11
Vasilieva, Y.V.	175
Vasilyeva, A.A.	183
Vavrenyuk, S.V.	209
Vavrenyuk, V.G.	209
Veeranaath, V.	83
Veerappan, B.	67
Vojtko, M.	143
Voon, C.H.	93

W

Wankhede, S.	41
--------------	----

Z

Zurnadzhy, V.	143
---------------	-----